



Level



Pressure



Flow



Temperature



Liquid  
Analysis



Registration



Systems  
Components



Services



Solutions

## Investing in Memosens saves costs

Now it's easy to calculate the savings online

**It is not a contradiction to say that investments help to reduce costs. Customers of Endress+Hauser have saved up to 50% on their maintenance costs since the commercial launch of Memosens five years ago. Those interested can now calculate the savings to be gained from using the non-contact sensor technology online on Endress+Hauser's web site.**

### **Switching from analog to digital is worth it**

As of October 2009, Endress+Hauser has supplied more than 130,000 pH electrodes with Memosens. Depending on the area of application and customer requirements, users save between 30% and 50% of their costs when compared to analog pH measuring points. With the new online calculator on [www.apps.endress.com/memosens](http://www.apps.endress.com/memosens), customers can now calculate their cost savings on the basis of standard values. They can also find out at what point in time their investment will have paid for itself. A simple calculation requires only three values: the number of measuring points, the number of calibrations per month and the number of replacement sensors per year and per measuring point. If customers know their company's hourly rates for experts and operating personnel as well as the calibration times, the calculation can be customized further.



**Endress+Hauser**

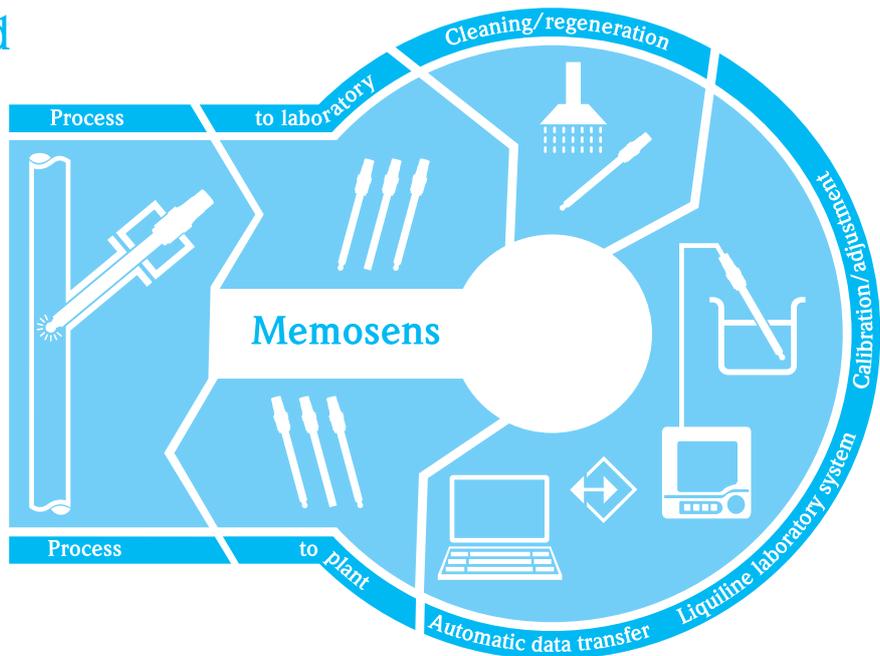
People for Process Automation

# Customers adopt Memosens technology as standard

Nowadays, a world without Memosens sensors and their inductive plug-in connection is virtually inconceivable. The technical benefits of this sensor technology are particularly apparent under harsh process conditions. Customers in the process industry, such as Bayer, Merck and Lanxess, have already adopted Memosens as a standard in their plants.

Mr. Werske, an expert in measurement and control technology in the chemical production of Merck KGaA, highlights the key benefits of Memosens: "The possibility of simply exchanging the sensors on site and servicing them at a central location under ideal conditions results in quality and cost advantages which more than justify the costs of retrofitting."

As part of their innovative calibration and maintenance strategy, Merck relies on predictive maintenance, with the staff simply replacing the sensors on site with calibrated sensors at regular intervals.



Specialists in measurement technology then regenerate the replaced electrodes in their own factory and make them ready for operation in the process again. This strategy prolongs the operating life of the

sensors significantly. Experts use Memobase software to analyze and optimize their measuring systems and maintenance strategies.

# Joint effort for utilizing and enhancing Memosens technology

Memosens has caused a stir in the industry. Four out of five Endress+Hauser customers are now opting to use the smart sensor technology when fitting out new plants. Thanks to these satisfied customers and partnerships, the technology is on the way to becoming an industry standard.

The first partnership agreement was signed between Endress+Hauser and Knick. These two manufacturers of measurement technology are developing a joint platform for inductive, non-contact connection systems for the benefit of all users. Quality and compatibility are guaranteed by the Memosens seal of quality. Hamilton Bonaduz is another manufacturer who is supplying Memosens sensors. This means that customers can now choose from several suppliers of sensors and devices.





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## Cost Savings Calculator

**Memosens saves money: Check your potential savings in pH measurement with Memosens**

**1st Step:**  
Simply enter the number of measuring systems, calibrations and exchange sensors and the calculator gives you the results based on standard values for calibration time and hourly staff rates.

**2nd Step:**  
Refine the calculation and enter the actual calibration times and hourly staff rates for your plant.

**Calculator**

<b>Number of measuring systems</b>	<input style="width: 40px; border: 1px solid black;" type="text" value="10"/>
<b>Number of calibrations</b> <small>(per month and measuring system)</small>	<input style="width: 40px; border: 1px solid black;" type="text" value="4"/>
<b>Number of exchange sensors</b> <small>(per year and measuring system)</small>	<input style="width: 40px; border: 1px solid black;" type="text" value="2"/>

**Calculate your savings**





[www.apps.endress.com/memosens](http://www.apps.endress.com/memosens)



## The Memosens technology

A remarkable feature of Memosens sensor technology for analytical measuring technology is its ease of use with its inductive plug-in connection. Its integrated intelligence means that data relating to the process and the sensor can now be saved and also put to further use directly in the plug-in head. This means that the sensors can be calibrated centrally in a laboratory under constant and ideal conditions. Non-contact digital signal transmission has revolutionized pH measurement and prolonged the operating life of the sensor by up to 40%. Thanks to 100% galvanic isolation, Memosens is resistant to environmental influences, even under water.

In addition to digital pH measurement, Memosens technology is also already available for ORP, conductivity, oxygen and chlorine. This platform will be systematically expanded to include other liquid analysis parameters. The future of analytical measuring technology belongs to these smart, non-contact sensors.

### Advantages of the technology

- Only system on the market with perfect galvanic isolation, inductive and non-contact transmission of data and energy
- Measured values are processed in the sensor's plug-in head
- Resistant to environmental influences such as moisture, corrosion and salt bridges; even possible to plug in the system under water
- Patented bayonet lock for easy opening and closing, without twisting the cable
- Sensor operating life up to 40% longer, few calibration cycles
- No grounding pin or potential matching necessary





### **Endress+Hauser Conducta GmbH+Co. KG, Gerlingen, Germany**

Endress+Hauser Conducta GmbH+Co. KG is one of the world's leading specialists in liquid analysis. Established in 1970, the company joined the Endress+Hauser Group in 1977. The company's innovative products and state-of-the-art manufacturing plants are evidence of its high level of expertise. Endress+Hauser Conducta employs more than 500 staff at locations in Gerlingen and Waldheim, Germany, Anaheim, California/USA, and Suzhou, China.

### **The Endress+Hauser Group**

Endress+Hauser is a global leader in measurement instrumentation, services and solutions for industrial process engineering. With over 8,400 employees worldwide, the Group generates annual net sales of more than 1.2 billion euros.

### **Structure**

Company-owned sales centers and a network of partners guarantee competent worldwide support. Production centers in eleven countries meet customers' needs and requirements quickly and effectively. As a successful family-owned business, Endress+Hauser is set for continued independence and self-reliance in the future.

### **Products**

Endress+Hauser provides sensors, instruments, systems and services for level, flow, pressure and temperature measurement as well as liquid analysis and data acquisition. The company supports customers with solutions and services in automation engineering, logistics and information technology. Our products set standards in quality and technology.

### **Industries**

Customers are primarily from the chemicals/petrochemicals, food & beverage, water/wastewater, life science, oil & gas, power & energy, renewable energies, primaries & metal, pulp & paper and shipbuilding industries. Endress+Hauser supports its customers to optimize their process engineering procedures while taking into consideration reliability, safety, economic efficiency and environmental protection.

### **History**

Founded in 1953 by Georg H Endress (1924 – 2008) and Ludwig Hauser (1895 – 1975), Endress+Hauser has been solely owned by the Endress family since 1975. The company group, headed by Klaus Endress since 1995, has developed from being a specialist in level measurement to a provider of complete solutions for industrial measuring technology and automation, with constant expansion into new territories and markets.

For further information, please visit [www.press.endress.com](http://www.press.endress.com) or [www.endress.com](http://www.endress.com)

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